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PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Weiner

Examiner: S. Staicovici

Serial No.: 10/606,074

Group Art Unit: 1732

Filed June 25, 2003

For: Imbedded Vinyl Products and Method of Producing Same

APPEAL BRIEF

Commissioner of Patents and Trademarks
P. O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

Further to the Notice of Appeal filed March 26, 2007, which was accompanied with the statutory fee of \$250, and again May 12, 2008. The \$250 fee for the submission of an appeal brief was enclosed with the brief filed April 2, 2007 and the \$255 fee for the submission of an appeal brief is enclosed herewith. Please charge any additional fee or credit any overpayment to Deposit Account No. 13-3403.

I. PRESENTATION OF THE APPEAL

A. Real Party in Interest

The real party in interest is Appellants' assignee, Product Concepts Residential, LLC, a Georgia limited liability company with its principal place of business at 525-B Calahan Road, Dalton, GA 30722.

B. Related Appeals and Interferences

There are no related appeals and interferences.

C. Status of Claims

At the time of the final Office Action, claims 1-10, 13 and 14 were pending in the application. The application was initially filed with 20 claims. Claims 1, 15 and 20 were amended with an Amendment and Response filed May 18, 2006. Claims 1 and 4 were amended while Claims 11-12, and 15-20 were cancelled with the response filed November 26, 2007.

A copy of the claims subject to this appeal appears in Appendix A.

D. Status of Amendments

No proposed amendments have been proposed or entered after final.

E. Summary of Invention reflecting at least the Independent Claims

Most generally, the present invention relates to a vinyl product having embedded design material therein. (Page 1, lines 4-5). The embedded design material is selected from the group of chips and pellets (Page 5, line 12) as well as drips and streams (Page 7, line 7).

For claim 1, a conveyor belt **18** has at least a first design material **36** applied thereto by deposition (Page 4, lines 14-15). The deposited material **36** is applied without completely covering the belt **18** (Page 2, lines 19-20 and Claim 1 as originally filed). Next a first substrate layer **42** is applied over the first or second deposited materials **36,38** (Page 5, lines 6-7) with at least a portion of the design material **36** remaining in contact with the conveyor belt **18** (Page 7, lines 19-20 and Claim 1 as originally filed). The vinyl sheet product is then cured and then directed on for further processing (Page 5, lines 20-22, Claim 1 as originally filed and Fig. 1). A scrim **50** may also be applied to the first

substrate layer **42** and/or a second vinyl substrate layer **54** is applied over the scrim **50** in one embodiment prior to the curing step (Page 5, lines 15-17).

F. Grounds of Rejection to be Reviewed on Appeal

1. Whether the Examiner properly rejected claims 1, 4-6, and 13 as being either anticipated or obvious over Weaver, U.S. Patent No. 3,923,941 (hereinafter "Weaver '941") in the Final Office Action.

2. Whether the Examiner properly rejected claims 2 and 3 as being obvious over Weaver '941. in view of Bartlett, U.S. Patent No. 2,867,263 (hereinafter Bartlett '263) and Fine, U.S. Patent No. 4,349,597 (hereinafter Fine '597) in the Final Office Action.

3. Whether the Examiner properly rejected claims 7-9 as being obvious over Weaver '941. in view of Mell, U.S. Patent No. 1,730,673 (hereinafter "Mell '673") in the Final Office Action.

4. Whether the Examiner properly rejected claim 10 as being obvious over Weaver '941. in view of Reed, U.S. Patent No. 3,264,385 (hereinafter "Reed '385") in the Final Office Action.

5. Whether the Examiner properly rejected claim 14 as being obvious over Weaver '004. in view of Suzuki et al., U.S. Patent No. 6,589,631 (hereinafter "Suzuki '631") in the Final Office Action.

II. ARGUMENT

A. Obviousness Rejection of Claims 1, 4-6 and 13

Weaver '941 shows a process for making of a marbled plastic sheet. Conveyor belt **14** transports a substrate **9** below a fluid applicator **8** which applies marbled

coating on top thereof. Applicator 8 rotates and oscillates while applying the plastisol 5 on substrate 8. (Col. 3, lines 31-34 and 36-39). The marbled coating 19 is then gelled by passing it through heating means. (Col. 3, lines 39-41). A clear top coating 21 is then applied on top of the marbled coating 19. (Col. 3, lines 49-58). The coatings 19 and 21 are then fused by heating arrangement 23. The composite sheet 24 may then be stripped from the substrate 9 as by the arrangement 25. (Col. 3, lines 58-60).

The inventor in Weaver states: "It is therefore an object of this invention to set forth and improved method and apparatus for producing marbled plastic sheet wherein a system is provided for programming a wide variety of patterns, each of which is controllable, substantially reproducible and, extends through the thickness of the sheet." (Col. 2, lines 25-34).

Claim 1 excludes the possibility of applying a design material with a roller ball as is done in Weaver. Specifically the design material is one of drips, streams, chips or pellets. Weaver rolls a coating onto a substrate. Accordingly, the applicant's method will provide a different pattern effect than Weaver. There is no way to modify the Weaver device to provide one of drips, streams, chips or pellets to the substrate 9 as Weaver would then not appear to work for its intended purpose to provide the repeatable marbled effect described as an object of that invention. This provides a first basis for allowance of claims 1 and those claims that depend therefrom. Specifically, Weaver explicitly teaches away from the claimed step of deposition.

Claim 1 also requires the deposited layer to form the upper surface in an installation. This is recognized in the response to arguments provided with the Final Office Action. Unfortunately, the Examiner and Applicant disagree as it relates to an

inversion. Weaver consistently refers to layer **21** as the top layer. There is no teaching or suggestion in Weaver for **21** to function as a bottom layer other than the applicant's disclosure. In fact, with all of the effort to make layer **21** translucent or transparent in Weaver, Weaver is believed to expressly teach away from such an installation. Col. 3, lines 49-60. This provides a separate basis of allowance for claim 1 and those that depend therefrom.

Claim 13 can stand or fall with claim 1. Claims 4-6 depend from claim 1 and are also believed to be allowable on these bases.

Claim 4 also requires the deposition of design material to be directly to the conveyor. Conveyor **14** is clearly shown and described as such in Weaver, and there is no deposition being done on the conveyor **14**. Instead, all deposition occurs on substrate **9**. Claims 5 and 6 depend from claim 4 and can stand or fall with claim 4 on this separate basis.

B. Obviousness Rejection of Claims 2 and 3

Claims 2 and 3 were rejected as being obvious over Weaver in view of Bartlett and Fine. The applicant and the Examiner agree that Weaver '941 is silent as to having a second vinyl layer and scrim as observed by the Examiner. However, if the structure of Weaver were to be laminated as taught in Bartlett with a second vinyl layer, it would be done so that top layer **21** remained a top layer and visible (i.e., not imbedded to be an intermediate layer as is proposed by the Final Office action to formulate the obviousness rejection). Remember Weaver consistently refers to layer **21** as the top layer. There is not believed to be a teaching apart from the applicant's for the construction proposed by

the Final Office Action. Accordingly claim 2 is believed to be allowable on this separate basis.

Fine teaches the use of a scrim, but once again, applying the scrim to cover the layer described as the top layer **21** would be an inappropriate use of the references (i.e., to make a reference incapable of its intended function is not believed to be a proper obviousness rejection). The applicant believes the proposed combination expressly teaches away from claim 3 as well.

C. Obviousness Rejection of Claims 7-9

Claims 7-9 were rejected as being obvious over Weaver in view of Mell. Weaver does show lateral reciprocation of applicator **8** with cam system **18a** and **18b**, but not with the portion cited by the Office Action from Column 2, lines 60-65. Weaver provides an applicator **8** as a ball which rolls plastisol **5** on substrate **9**.

The applicant agrees with the Examiner that Weaver is silent as it relates to nozzles or orifices. In fact, nozzles or orifices would not work for the intended purpose in Weaver of providing a repeatable marbleized effect as there is no teaching as to how such might be accomplished.

Mell was cited as providing multiple orifices. Unfortunately, the Applicant disagrees that Mell can be combined with Weaver in the manner articulated by the Office Action to provide a proper obviousness rejection.

First, claim 7 depends from claim 4 and is believed to be allowable as argued above. Second, claim depends from claim 1 and requires the application of drips, streams as a liquid. Liquid cannot be applied as the strips of extruded material are done in Mell. Specifically, the strips **13**, **14** in Mell are transferred from conveyors **16** and **17** to

conveyor 15. If they are not continuous strips, the Mell device can not work for its intended purpose. With the angle of conveyor 15, gravity would pull the liquid material to tend to drain off the back end (opposite calendar 10) and not be fed to the calendar 10. Accordingly, since neither reference suggests or teaches the application of drips or streams, claim 7 is believed to be allowable on this basis as the references are believed to teach away from such use by not being able to work for their intended purpose by using such forms as design material. Weaver shows rolled on coatings, not drips or streams provided from orifices.

Attempting to combine Mell with Weaver also does not teach the subject matter of claim 7. There is no way to modify Mell with Weaver to create a system from which liquid design media could be deposited from a hopper onto a conveyor as drips or as a stream with the combined structure of Mell and Weaver while still meeting the objectives of those two references. Accordingly, the proposed combination is believed to teaches away from claim 7. Claims 8-9 can stand or fall with claim 7.

D. Obviousness Rejection of Claim 10

Claim 10 depends from claim 4 and is believed to be allowable for the rationale provided above fore claim 4. Claim10 provides the additional claim limitation of applying an embossed roller to the design material prior to applying the vinyl substrate layer. Claim 10 was argued as being obvious over Weaver in view of Reed.

Reed shows a method of casting a printed pattern on a plastic sheet, it specifically discloses in Col. 4, lines 31-50 that the depressions 21 are fed with a pigment feed which is then applied to a web material. These rollers do not act on the liquid web material, but shape the added pigment feed. Accordingly, neither this reference nor the Weaver

reference teaches the additional limitations of claim **10** in that a roller with embossed indicia is applied to the liquid design material prior to applying the first substrate layer. Furthermore, apart from the disclosure of the applicant, there would be no motivation or suggestion to apply the teachings of Reed to the technology disclosed in Weaver for creating the claim as provided by the applicant. A *prima facie* case of obviousness is now believed to be in proper form in relation to at least this claim.

Additionally, neither reference teach treating design material after it has been applied to a conveyor with an embossed roller. Pulling one of the rollers **14,16** out of Reed and picking an appropriate location in Weaver as to where it could be utilized to meet the limitations of claim 10 is not a proper obviousness rejection as there is no teaching or suggestion in the prior art as to how that might be accomplished without using the applicant's specification as a road map. Allowance of claim 10 is respectfully requested on this additional basis.

The rationale as to why this argument was not persuasive as articulated in the Office Action could not be followed by the Applicant. Basically it appears that the Final Office Actions' position is that since they are both decorative items, it would have been obvious to texturize the marble coating of Weaver with Reed since Weaver has a texture on the obverse side. Unfortunately, the wrong side is what would be addressed by such a combination (i.e., the side away from the conveyor) and Weaver's top layer **21**. This is believed to further be illustrative that the proposed inversion for the rationale of rejecting of claim 1 as articulated by the Final Office Action is improper. Furthermore, this rationale is believed to support the applicant's position that the top side must be the side as applied to the conveyor.

E. Obviousness Rejection of Claim 14

Claim 14 depends from claim 1 and is believed to be allowable for the rationale provided above. Furthermore, this obviousness rejection is believed to be another proposed combination which makes the suggested teachings unworkable for their intended purpose as it relates to their component parts. This teaches away of the claimed invention. Specifically, claim 14 requires the conveyor to have at least two heights and provide a texture to a lower surface of the vinyl sheet product.

Attempting to mate Suzuki with Weaver as proposed by the Office Action also creates a system that will not accomplish the limitations of claim 14. Specifically, remember that the Office Action consistently refers to substrate 9 as the “conveyor”. If a substrate is provided on the conveyor, it will fill in all of the two height pattern to make a single top surface to which the design material is then applied. Accordingly, when the substrate 9 is stripped away, only a single height design material would be left. Quite simply, the proposed combination teaches away from the claim.

The applicant would agree with the Examiner’s characterization of Suzuki as teaching a method to transfer a pattern to a floor covering with at least two heights. The applicant would disagree that Suzuki teaches utilizing a conveyor texture for that purpose as Col. 13, lines 34-64 are directed to utilizing a dye 18 for the purpose of creating the impression of the floor mat taught in that reference. Accordingly, at least the element of a conveyor having the at least two different heights to impart a texture is not believed to be provided in any of the cited references.

The rationale provided for the rejection of this argument in the Final Office Action is believed to illustrate that the Examiner recognizes that the cited art does not


teach the element, but effectively states: "one of ordinary skill would have been motivated to make this construction...". This is not the standard for obviousness, and is believed to rely on a mischaracterization of the cited references and the applicant's specification as a roadmap to make the rejection. Claim 14 is separately allowable on these bases.

III. CONCLUSION

Claims 1-10, 13 and 14 are not believed to be obvious over Weaver and others for the rationale provided in this brief. Allowance of claims 1-10, 13 and 14 is respectfully requested.

Respectfully submitted,

MILLER & MARTIN PLLC



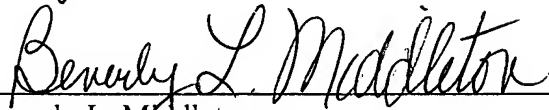
Stephen J. Stark
Reg. No. 43,152
Attorney for Applicant
832 Georgia Ave., Suite 1000
Chattanooga, TN 37402-2289
(423) 785-8229

CERTIFICATE OF MAILING

I hereby certify that the preceding Brief on Appeal is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

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On this 1st day of July, 2008.


Beverly L. Middleton

APPENDIX A

1. A method of creating a vinyl sheet product comprising the steps of:

depositing a design material onto a conveyor, said design material in the form of one of drips, streams, chips and pellets deposited so as to not completely cover a top surface of the conveyor where applied;

applying a first vinyl substrate layer of a predetermined height over on the conveyor over the design to create a vinyl sheet product, at least a portion of the design material remaining in contact with the conveyor; and

curing the vinyl sheet product, wherein when the vinyl sheet product is removed from the conveyor, the design material forming an indicia relative to the first vinyl substrate layer and inverted for use in installations with which is visible from above when installed.

2. The method of claim 1 further comprising the step of applying a scrim to an exposed surface of the first vinyl substrate layer after applying the first vinyl substrate layer.

3. The method of claim 2 further comprising the step of applying a second vinyl substrate layer over the scrim.

4. The method of claim 1 wherein the step of depositing the design material further comprises depositing a liquid design material directly onto the conveyor.

5. The method of claim 4 further comprising the step of at least partially curing the liquid design material prior to applying the first vinyl substrate layer.
6. The method of claim 4 further comprising the step of applying at least two distinct colors of liquid design material.
7. The method of claim 4 wherein the step of depositing the liquid design material further comprises providing a hopper having a plurality of orifices configured to apply the liquid design material from the hopper through the orifices to the conveyor.
8. The method of claim 7 wherein the hopper is moved while depositing the liquid design material to the conveyor.
9. The method of claim 7 wherein the hopper is moved in an laterally reciprocating motion while depositing the material to the conveyor.
10. The method of claim 4 further comprising the step of applying a roller having an embossed indicia thereon to the liquid design material prior to applying the first vinyl substrate layer.

11-12. (Cancelled)

13. The method of claim 1 wherein the step of curing the vinyl product further comprises transporting the product through an oven, and further comprising the step of cooling the cured vinyl after the product has left the oven.

14. The method of claim 1 further comprising the step of providing a conveyor having at least two different heights thereby imparting a texture to a lower surface of the vinyl sheet product.

15 -20. (Cancelled)

APPENDIX B: EVIDENCE APPENDIX

None

APPENDIX C: BOARD DECISION APPENDIX

None